REMARKS

Claims 1-44 were previously pending in this patent application. Claims 1-44 stand rejected. Accordingly, after this Amendment and Response, Claims 1-44 remain pending in this patent application. Applicant respectfully requests further examination and reconsideration in view of the arguments set forth below.

35 U.S.C SECTION 112, First paragraph

In the above referenced Office Action, Claims 1-44 are rejected under 35 U.S.C. Section 112, first paragraph, as containing subject matter which was not disclosed in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, the Office Action stated that the phrase "receiving and rendering concurrently" in Independent Claims 1, 8, 15, 24, and 35 was not supported in the specification.

Applicant respectfully traverses the rejection of Claims 1-44. Applicant submits that the claimed invention as recited in Claims 1-44 is adequately supported in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. Section 112, first paragraph, of Claims 1-44.

The specification supports the use of the phrase "receiving and rendering concurrently". In particular, the specification states at page 11, lines 25-27 to page 12, line 1:

"Chaincasting of the present invention does not require a high speed connection between the broadcast server 260 and the Internet 300 (Figure 4) and still **allows practically an unlimited number of users to receive and render the broadcasted program.**" (emphasis added)

Moreover, the specification states at page 15, lines 12-19:

"The transmission scheduler 200 then instructions the information transmitter of the server 260 to start transmitting the information to this IP address (the IP address of the new user) too, or it will instruct one of the radio softwares of a user that is already listening to the same program to forward the information to this new user. Therefore, **the new user will receive the data either directly from the server, over the Internet, or from another user that is already receiving the information.** The new user can then later be asked to provide, e.g., forward broadcast information to another user." (emphasis added)

These passages make clear that the phrase "receiving and rendering concurrently" refers to the fact that the electronic devices are at the same time receiving and rendering the broadcast information transmitted by either a broadcast source or another electronic device (which forwards the broadcast information) even though not all the electronic devices form a direct communication link with the broadcast source. In the prior art, a broadcast transmission was achieved by establishing separate communication channels between the broadcast source and each electronic device. In sum, Claims 1-44 are adequately supported in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

35 U.S.C. Section 103(a) Rejections

In the above referenced Office Action, Claims 1-4, 6-9, 13-19, 21-30, 32-40, and 42-44 are rejected under 35 U.S.C. Section 103(a) as being obvious over Fujita, U.S. Pat. No. 5,948,070 (hereafter Fujita) in view of Boswell, U.S. Pat. No. 5,559,933 (hereafter Boswell). Applicant respectfully traverses the rejection of Claims 1-4, 6-9, 13-19, 21-30, 32-40, and 42-44.

INDEPENDENT CLAIM 1

Claim 1:

A method of communicating broadcast information comprising the steps of:

a) causing a server to communicate **a first stream representing digital broadcast information** to a first user device wherein said server and said first user device are coupled to the Internet;

b) causing said server to communicate **a second stream representing said broadcast information** to a second user device wherein said second user device is coupled to the Internet;

c) causing said first user device to communicate **a third stream representing said broadcast information** to a third user device wherein said third user device is coupled to the Internet; and

d) **receiving and rendering, concurrently**, said broadcast information on said first, second, and third user devices. (emphasis added)

Fujita discloses a file transfer method and system. The file transfer system includes a file-sending communication processing system, relaying communication processing systems, and file-receiving communication processing systems. (Fujita, Col. 6, Lines 10-20). According to Fujita, a file is transmitted by the file-sending communication processing system to the appropriate relaying communication processing systems. (Fujita, Col. 8, Line 59 - Col. 11, Line 33). Each appropriate relaying communication processing

system receives the file and stores the file in its file storage device. (Id.) Then, each appropriate relaying communication processing system transmits the file to other appropriate relaying communication processing systems or to appropriate file-receiving communication processing systems. (Id.).

Boswell discloses a file transfer method and system. According to Boswell, the sending system transfers a file, not broadcast information, to a receiving system. [Boswell, Col. 10, lines 58-61]. The receiving system determines if the file to be transferred is too large to be <u>stored</u> on the receiving system. [Boswell, Col. 11, lines 14-17]. After successfully transferring the file, the sending system will look for additional files of the sending system to be sent. [Boswell, Col. 12, lines 30-31]. The receiving system allocates a File Database record buffer. This buffer holds the file information as it is received from the sending system. The file information sent by the sending system is decoded and written into the File Database record. A procedure to get a <u>directory for storing the incoming file</u> is then called. [Boswell, Col. 24, lines 30-37].

Applicant respectfully submits that Independent Claim 1 is not obvious over Fujita in view of Boswell. Fujita discloses the method and system of transferring files from a file source to a plurality of receiving devices via a plurality of relay devices. In particular, the entire file is stored and then transferred between a file source and a plurality of relay devices. Moreover, the entire file is stored and then transferred between a relay device and another relay device (or secondary relay device) or a receiving device. Again, in Boswell, the receiving system receives the incoming file and stores the

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incoming file rather than receiving and sending the incoming file to another receiving system. Unlike Fujita and Boswell, Independent Claim 1 is directed to a method of communicating broadcast information having the steps of causing a server to communicate a first stream representing broadcast information to a first user device, causing the server to communicate a second stream representing the broadcast information to a second user device, causing the first user device to communicate a third stream representing the broadcast information to a third user device, and receiving and rendering, concurrently, the broadcast information on the first, second, and third user devices. Thus, each user device receives and renders, concurrently, a portion of the stream of digital broadcast information transmitted by the server.

Fujita and Boswell do not disclose communicating between devices streams of data representing digital broadcast information. Moreover, in Fujita and Boswell, the relay devices (or receiving systems) receive the entire file before the secondary relay devices (or other receiving systems) and the receiving devices receive any portion of the file. Additionally, in Boswell, the language "maximum number of files transfers that a single PC component can send, receive, or send and receive simultaneously" means, in view of the discussion above, that the PC component sends a first file and receives a second file, whereas the first and second files are different files, unlike the invention in Independent Claim 1 whereas the user devices can send and receive the broadcast information. [Boswell, Col. 18, lines 56-58]. In sum, Independent Claim 1 is not obvious over Fujita in view of Boswell and is in a condition for allowance.

Dependent Claims 2-4 and 6-7 are dependent on allowable Independent Claim 1, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claims 2-4 and 6-7 are patentable over Fujita and Boswell for the reasons discussed above.

INDEPENDENT CLAIM 8

Claim 8 recites:

> A method of broadcasting information over a network of electronic devices, said method comprising the steps of:
> transmitting broadcast information from a server to a first group of electronic devices of said network; and
> achieving broadcasting of said broadcast information for said first group and a second group of electronic devices by forwarding said broadcast information from said first group of electronic devices to said second group of electronic devices of said network such that said first and second groups of electronic devices receive and render, concurrently, said broadcast information.

Applicant respectfully submits that Independent Claim 8 is not obvious over Fujita in view of Boswell. Fujita and Boswell disclose the method and system of transferring files from a file source to a plurality of receiving devices via a plurality of relay devices. In particular, the entire file is stored and then transferred between a file source and a plurality of relay devices. Moreover, the entire file is stored and then transferred between a relay device and another relay device (or secondary relay device) or a receiving device. Unlike Fujita and Boswell, Independent Claim 8 is directed to a method of communicating broadcast information over a network of electronic devices, the method having the steps of transmitting broadcast information from a server to a first group of electronic devices, and achieving broadcasting of the broadcast information by

forwarding information from the first group of electronic devices to a second group of electronic devices of the network such that the first and second groups of electronic devices receive and render, concurrently, the broadcast information. Thus, each user device receives and renders, concurrently, a portion of the broadcast information transmitted by the server.

Fujita and Boswell do not disclose communicating between devices streams of data representing digital broadcast information. Moreover, in Fujita and Boswell, the relay devices (or receiving systems) receive the entire file before the secondary relay devices (or other receiving systems) and the receiving devices receive any portion of the file. In sum, Independent Claim 8 is not obvious over Fujita in view of Boswell and is in a condition for allowance.

Dependent Claims 9 and 13-14 are dependent on allowable Independent Claim 8, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claims 9 and 13-14 are patentable over Fujita and Boswell for the reasons discussed above.

INDEPENDENT CLAIM 15

With respect to Independent Claim 15, it is respectfully submitted that Independent Claim 15 recites similar limitations as in Independent Claim 1. Therefore, Independent Claim 15 is allowable over Fujita and Boswell for reasons discussed in connection with Independent Claim 1.

Dependent Claims 16-19 and 21-23 are dependent on allowable Independent Claim 15, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claims 16-19 and 21-23 are patentable over Fujita and Boswell for the reasons discussed above.

INDEPENDENT CLAIM 24

With respect to Independent Claim 24, it is respectfully submitted that Independent Claim 24 recites similar limitations as in Independent Claim 1. Therefore, Independent Claim 24 is allowable over Fujita and Boswell for reasons discussed in connection with Independent Claim 1.

Dependent Claims 25-30 and 32-34 are dependent on allowable Independent Claim 24, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claims 25-30 and 32-34 are patentable over Fujita and Boswell for the reasons discussed above.

INDEPENDENT CLAIM 35

With respect to Independent Claim 35, it is respectfully submitted that Independent Claim 35 recites similar limitations as in Independent Claim 1. Therefore, Independent Claim 35 is allowable over Fujita and Boswell for reasons discussed in connection with Independent Claim 1.

Dependent Claims 36-40 and 42-44 are dependent on allowable Independent Claim 35, which is allowable over Fujita and Boswell. Hence, it is

respectfully submitted that Dependent Claims 36-40 and 42-44 are patentable over Fujita and Boswell for the reasons discussed above.

35 U.S.C. Section 103(a) Rejections

In the above referenced Office Action, Claims 5, 10-12, 20, 31, and 41 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Fujita, U.S. Pat. No. 5,948,070 (hereafter Fujita) and Boswell, U.S. Pat. No. 5,559,933 (hereafter Boswell), in view of Nederlof, U.S. Pat. No. 5,590,118 (hereafter Nederlof). Applicant respectfully traverses the rejection of Claims 5, 10-12, 20, 31, and 41.

Dependent Claim 5 is dependent on allowable Independent Claim 1, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claim 5 is patentable over Fujita and Boswell for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and receiving and rendering concurrently, the broadcast information, as recited in Independent Claim 1. Thus, it is respectfully submitted that Dependent Claim 5 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 11 is dependent on allowable Independent Claim 8, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claim 11 is patentable over Fujita and Boswell for the reasons discussed above. Moreover, Nederlof does not disclose achieving broadcasting of broadcast information such that the first and second groups of

electronic devices receive and render, concurrently, the broadcast information, as recited in Independent Claim 8. Thus, it is respectfully submitted that Dependent Claim 11 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 20 is dependent on allowable Independent Claim 15, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claim 20 is patentable over Fujita and Boswell for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and receiving and rendering, concurrently, the broadcast information, as recited in Independent Claim 15. Thus, it is respectfully submitted that Dependent Claim 20 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 31 is dependent on allowable Independent Claim 24, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted that Dependent Claim 31 is patentable over Fujita and Boswell for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and receiving and rendering, concurrently, the broadcast information, as recited in Independent Claim 24. Thus, it is respectfully submitted that Dependent Claim 31 is patentable over Nederlof for the reasons discussed above.

Dependent Claim 41 is dependent on allowable Independent Claim 35, which is allowable over Fujita and Boswell. Hence, it is respectfully submitted

that Dependent Claim 41 is patentable over Fujita and Boswell for the reasons discussed above. Moreover, Nederlof does not disclose communicating streams of digital broadcast information to devices and receiving and rendering, concurrently, the broadcast information, as recited in Independent Claim 35. Thus, it is respectfully submitted that Dependent Claim 41 is patentable over Nederlof for the reasons discussed above.

CONCLUSION

Applicant respectfully submits that the above remarks overcome all rejections. For at least the above presented reasons, Applicant respectfully submits that all remaining claims (Claims 1-44) are now in condition for allowance and Applicant earnestly solicit such action from the Examiner.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,

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